CONCLUSIONS With the widespread use of antibiotics and changes of pathogenic microorganisms, the clinical features of IE had a significant change, echocardiography and blood cultures contribute to the diagnosis of IE; the basis of heart disease is one of the IE common cause, and surgical treatment promptly may obtain better result.

GW26-e0212

Utility of C-reactive protein and Red Blood Cell Distribution Width in assessing the outcome of infective endocarditis

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OBJECTIVES To elucidate the merits of C-reactive protein (CRP) and Red Blood Cell Distribution Width (RDW) on the prognostic evaluation in patients with infective endocarditis (IE).

METHODS A retrospective study was performed, and the demographic and clinical characteristics of participants were collected with the use of electronic case report form. The association of CRP and RDW with in-hospital death was analyzed.

RESULTS Totally 307 participants diagnosed as IE were enrolled, in which 45 died during hospitalization period. When compared to survival patients, CRP and RDW level in mortality participants was significantly higher. In addition, increased level of WBC, vegetation size of >10mm and decreased hemoglobin, glomerular filtration rate, surgical treatment rate were found in dead patients. Multivariate analysis showed that CRP (OR=4.269, P=0.003), RDW (OR=3.438, P=0.002), glomerular filtration rate(OR=0.296, P=0.014), vegetation size of >10mm (OR=2.111, P=0.042) and surgical treatment (OR=0.405, P=0.023) were independent associated with in-hospital death. Moreover, CRP>35.05 mg/L had a sensitivity of 82.2% and specificity of 74.3% for predicting in-hospital death. The sensitivity and specificity of RDW>0.1587 were 86.7% and 59.2%, respectively. Combining use of CRP and RDW showed better performance in predicting in-hospital death.

CONCLUSIONS Increased CRP and RDW were associated with in-hospital death in patients with IE.

GW26-e3557

The diagnostic value of Transthoracic echocardiography in the assessment of anastomotic leakage after aortic replacement

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OBJECTIVES The patency of transplanting coronary artery and no anastomotic fistula are the determinant to the successful aortic replacement operation. Anastomotic leakage is the most serious postoperative complications. Accurate and early detection of the anastomotic leakage has the important clinical significance. The aim of this study is to discuss the diagnostic value of transthoracic echocardiography (TEE).

METHODS Thirty cases of aortic aneurysm and aortic dissection which occurred postoperative complications were involved in this study from June, 2013 to September, 2014 (including 15 cases of Bentall; 5 cases of Bentall+ Total aortic arch replacement; 8 cases of Bentall+ Total aortic arch replacement + elephant trunk; 2 cases of abdominal aorta aneurysm stenting). Their TTE features were to be retrospective analyzed.

RESULTS ①Thirteen patients were diagnosed with ascending aortic dissection, 15 patients with ascending aortic aneurysm and 2 patients with abdominal aortic dissection before the surgery by TEE; ②Postoperative TTE showed that: The anastomotic leakages were located at coronary artery and the edge between the artificial and autologous aortic anastomotic leakage. Of these, simple right coronary artery anastomotic leakage occurred in 11 cases (36.7%); simple left coronary artery anastomotic leakage occurred in 6 cases (20.0%); left combined with right coronary artery anastomotic leakage were in 4 cases (13.3%); simple proximal anastomotic leakage between artificial and autologous aorta were in 4 cases(13.3%); right coronary artery anastomotic leakage combined with increased peak artificial aortic valve velocities was in 1 case(3.3%); left coronary artery anastomotic leakage combined with autologous ascending aortic aneurysm, causing the compression of the superior vena cava and right pulmonary artery and having thrombosis in the false lumen was in 1 case(3.3%). Paravalvular artificial aortic valve leakage combined with severe regurgitation was in 1 case(3.3%); coronary artery anastomotic leakage combined with paravalvular artificial aortic valve leakage and thrombosis in autologous ascending aorta was in 1 case(3.3%); the anastomotic leakage between artificial and autologous aorta combined with the compression of artificial aorta in ascending aorta was in 1 case(3.3%); ③The complications include the anastomotic leakage, paravalvular artificial aortic valve leakage and thrombosis.

CONCLUSIONS TTE can noninvasively and accurately detect the anastomotic leakage and other severe complications; it can be used to be the preferred imaging method in clinical settings.

CARDIOMYOPATHY

GW26-e0244

Predictors of long-term survival patients with cardiac amyloidosis: prognostic value of late gadolinium enhancement in cardiac magnetic resonance

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OBJECTIVES Cardiac amyloidosis is usually characterized by a poor outcome. We aimed to investigate the predictive value of late gadolinium enhancement (LGE) in cardiac magnetic resonance (CMR) for survival of cardiac amyloidosis patients.

METHODS We recruited a total of 162 consecutive patients with endomyocardial - biopsy proven cardiac amyloidosis. These patients undergoing CMR at enrollment were followed up for 5 years.

RESULTS 141 (87%) patients died during the 5-year follow-up, and 78 (48%) patients with poor short-term outcome (survival for less than one-year) were characterized by older (57±12 vs 51±15 years, p =0.016), more present with heart failure (42.3% vs 21.4%, p =0.006), pericardial effusion (57.7% vs 30.9%, p =0.001), sever thick interventricular septum (IVS) (16±4 vs 14±4, p=0.019) and LGE in CMR at enrollment (89.7% vs 51.2%, p <0.001). At multivariable cox regression analysis, heart failure (HR 1.79, 95%CI: 1.12-2.94, p =0.010), greater IVS (HR: 1.46, 95%CI: 1.09-3.11, p = 0.021) and LGE in CMR (HR 5.16, CI: 1.60-9.25, p=0.001) emerged as independent predictors of all-cause mortality.

CONCLUSIONS We have showed LGE in CMR is the strong predictor of all-cause mortality in patients with cardiac amyloidosis. Examination of CMR provides valuable prognostic information concerning short and long-term outcome.

GW26-e4784

Value of Echo Myocardial Mechanical Parameters in Diagnosis and Prognosis of Cardiac Amyloidosis

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OBJECTIVES To assess the value of a novel velocity vector imaging(VVI) echocardiographic measurement of myocardial strain in diagnosis and prognosis of Chinese patients with cardiac amyloidosis.

METHODS 35 patients with biopsy-proved confirmed AL-cardiac amyloidosis,30 patients with asymmetric hypertrophic cardiomyopathy and 30 age-matched healthy volunteers were included in the study. Three groups underwent clinical and standard echo evaluation at baseline and VVI. VVI was used for the evaluation of LV segments, walls, regional parts and LV global endocardial (ENDO) longitudinal strain (LS). Then we followed these 35 AL-CA patients for 3 years and the primary end point was all-cause mortality. Clinical data, standard echocardiographic parameters and systolic ENDO LS for 16 LV segments were tested as potential independent predictors of survival.

RESULTS ENDO LS in LV 16 segments, 6 walls and global LV were obviously decreased in AL-CA. However, those changes in HCM were variable. LV Basal regional ENDO LS was sensitive (85%) and specific (85%) in differentiating AL-CA from HCM (ROC area under the curve was 0.916). During a median follow-up of 17.5 months (first to third interquartile: 7-28.5 months), 17 patients (50%) died. NYHA classification (hazard ratio [HR], 11.86; P = 0.000), Logpro-BNP (HR, 5.54; P = 0.03), and basal septal ENDO LS (HR, 1.35; P = 0.000) were independent predictors of AL-CA.

CONCLUSIONS VVI echocardiographic measurement demonstrated significant differences in AL-CA and HCM: AL-CA is characterized by a